

PGDM (Apparel) Course

Core Subjects

Code	Subjects	Credits
First Semester		
DM1108	Basics of Textiles/Principles of Management	3
DM1208	Fabric Manufacturing Technology/Managerial Economics	3
DM1308	Organizational Behaviour	3
DM1408	Business Law and Ethics	3
DM1508	Accounting for Managers	3
DM1608	Marketing Management	3
DM1708	Research methods and statistics for Management	3
DM1808	Computer Applications in Business	Non-credit
Total credit for Semester I		21
Second Semester		
DM2108	Apparel Production Technology	3
DM2208	Apparel Merchandising	3
DM2308	Quantitative Techniques	3
DM2408	Financial Management	3
DM2508	Strategic Management	3
DM2608	Human Resource Management	3
DM2708	Economic Environment of Textile Industry	3
DM2808	Summer Project	6
DM2908	Project Management	Non-credit
Total credit for Semester II		27
Third Semester		
DM3108	Quality Control in Textiles	3
DM3208	Textile Costing	3
DM3308	Logistics and Supply Chain Management	3
DM3408	Business Communication	3
DM3608*	Elective – E IA	3
DM3708*	Elective – EIIA	3
DM3508	International Trade Procedure and Documentation	Non-credit
Total credit for Semester III		18
Fourth Semester		
DM4108	Finishing and Processing of Textiles	3
DM4208	Management Information System	3
DM4308	Technical Textile Management	3
DM4408	Entrepreneurship Development	3
*	Elective – EIB	3
*	Elective – EIIB	3
*	Elective – EIC	3
*	Elective – EIIC	3
Total credit for Semester IV		24
Total Credit for Degree		90

- Code number of subject as per elective chosen

Elective Subjects

Apparel Management (Sectoral - Compulsory 3 subjects)		
Code	Subjects	Credits
DMA108	Production and Operations Management	3
DMA208	Fabric Structure and Design	3
DMA308	Smart Textiles	3
DMA408	Work Study in Apparel Industry	3
DMA508	Materials Management in Apparel	3
Elective Subjects (Functional)		
Code	Subjects	Credits
Finance		
DMF108	Working Capital Management in Textile Industry	3
DMF208	International Financial Management	3
DMF308	Security Analysis and portfolio management	3
Marketing		
DMM108	Retailing Management	3
DMM208	Advertising and sales promotion	3
DMM308	Customer Relationship Marketing	3
DMM408	Brand Management	3
DMM508	International Marketing	3
DMM608	Consumer Behaviour	3
Human Resources		
DMH108	Human Resource Development	3
DMH208	Labour Welfare and Industrial Relations in Textile Industry	3
DMH308	Employment Laws	3
Information Technology		
DMI108	E – Business in Textiles	3
DMI208	Enterprise Resource Planning in Textile Industry	3
DMI308	Data Base Management System	3

The Subjects, Basics of Textile and Fabric Manufacturing Technology can be swapped with Principles of management and Managerial Economics for students with graduation in Textiles with the same credits.

DETAILED SYLLABUS

DM1108 – BASICS OF TEXTILES

Objective: *To make students learn the basic properties and manufacturing processes of textile materials.*

UNIT I	10
Definition and classification of textile fibres – Natural fibres: Cotton, Wool, Silk, Jute, Flax – Cotton varieties – Important physical and chemical properties – Man made fibres: Viscose, Nylon, Polyester, Acrylic, Polypropylene – Important physical and chemical properties – Textured Yarns – Elastomeric yarns	
UNIT II	8
Yarn numbering systems – English count, metric count, tex, denier –Conversion from one system to another –Yarn classifications – Yarn twists – Sewing & Embroidery threads.	
UNIT III	12
Introduction spinning – Blow room – Carding – Drawing - Combing – Roving – Ring spinning – Doubling – TFO – Winding – Introduction to modern spinning systems.	
UNIT IV	8
Nonwovens – Web formation – Mechanical bonding – Chemical bonding – Thermal bonding – Stitch bonding	
UNIT V	7
Overview of Indian textile industry – Organisational textiles mill industry – Decentralised Power Loom sector – Handlooms – Cotton Man-made Yarn industry – Woollen textiles industry – Sericulture – Handicrafts – Textiles exports sector-wise – Various Govt. schemes.	

References:

1. Gordon, Handbook of Textile Fibres, Vol I & II, Woodhead Publishing.
2. J.E Booth, Principles of Textile Testing, Newnes Butterworth.
3. C. Lawrence, Yarn Technology, CRC Press, 2003
4. Corbman, Textile Fibre to Fabric, McGraw-Hill
5. A.R Kahre, Elements of Blow Rooms and Carding, Sai Publications.
6. A.R Kahre, Elements of Drawframes and Combing, Sai Publications.
7. A.R. Kahre, Elements of Ring Spinning and Doubling, Sai Publications.
8. Radko, Manual of Non – wovens, Textile Institute

DM1108 – PRINCIPLES OF MANAGEMENT

Objective: *To familiarize the student with basic concepts in Management with reference to Textiles and Apparel Industry.*

UNIT I	9
Management: Science, Theory and Practice - The Evolution of Management Thought and the Patterns of Management Analysis. Cases from Textiles and Apparel.	
UNIT II	9
Management and Society: Social Responsibility and Ethics - Global and Comparative Management - The Basis of Global Management – Functions of Management-The Nature and Purpose of Planning - Objectives - Strategies, Policies and Planning Premises - Decision Making - Global Planning.	

UNIT III	9
The Nature of Organizing - Organizational Structure: Departmentation - Line/Staff Authority and decentralization - Effective Organizing and Organizational Culture - Global Organizing.	
UNIT IV	9
Co-ordination Functions in Organization - Human Factors and Motivation - Leadership - Committees and group Decision Making - Communication - Global Leadership.	
UNIT V	9
Direction Function – Significance. The System and Process of Controlling - Control Techniques and Information Technology - Global Controlling and Global Challenges.	

References:

1. Koontz & Weirich, *Essentials of Management*, Tata McGraw Hill Publishing Company, New Delhi.
2. Stoner, Freeman & Gilbert, *Management*, PHI, 6th Edition.
3. Robbins.S.P., *Fundamentals of Management*, Pearson, 2003.
4. VSP Rao, V Hari Krishna, *Management: Text and Cases*, Excel Books

DM1208 – FABRIC MANUFACTURING TECHNOLOGY

Objective: *The course aims to make the student gain knowledge about fabric manufacturing technology and its production capacity.*

UNIT I	9
Principle and working Concept of weaving preparatory processes and its production calculation: Automatic Winding- Beam and Sectional Warping – Sizing – Drawing-in.- yarn quality requirement for weaving and knitting.	
UNIT II	12
Principle and working concept of various types of weaving(looms) and its production calculation : Shuttle loom – primary, secondary and auxiliary motions –Tappet, Dobby and jacquard – Automatic looms – Shuttleless looms – Rapier, Projectile, Air-jet and Water-jet.	
UNIT III	12
Principle and working concept of various types of weft knitting and its production calculation: Types of knitting – Circular knitting machine – Knitting elements – Tuck, Knit and miss stitch-Knitting action for production of single jersey fabric, Double Jersey (Rib & Interlock) fabrics, - Jacquard design Patterning mechanism: Pattern wheel, Pattern drum, peg drum machine, punched steel tape, Electronic devices for needle selection - V-bed Flat weft Knitting	
UNIT IV	6
Principle and working concept of various types of Warp Knitting: Tricot and Rachel warp knitting.	
UNIT V	6
Fabric production and trends in various sectors – Modernisation – Competitiveness of Indian fabrics	

References:

1. R. Marks and A.T.C. Robinson, *Principles of Weaving*, The Textile Institute, 1976
2. M.K. Talukdar, P.K. Sriramulu and D.B. Ajgaonkar, *Weaving:Machines, Mechanisms, Management*, Mahajan Brothers, 1998
3. D.B. Ajgaonkar, M.K. Talukdar and Wadekar, *Sizing : Materials, Methods and Machines*, Textile Trade Press, 1982
4. A. Ormerod and W.S. Sondhelm, *Weaving : Technology and Operations*, Textile Institute, 1998

5. D. J. Spencer, *Knitting Technology*, Woodhead Publishing, 2001
6. D.B. Ajaonkar, *Knitting Technology*, Universal Publishing Corporation, Bombay, 1998.

DM 1208 MANAGERIAL ECONOMICS

Objectives: *To acquaint the participants with concepts and techniques used in Microeconomic theory and to enable them to apply this knowledge in Business Decision making. Emphasis is given to changes in the nature of business firms in the context of Textiles and Apparel.*

UNIT I	9
Managerial Economics - meaning, nature and scope - Managerial Economics and Business Decision making - Role of Managerial Economist - Fundamental concepts of Managerial Economics- Demand Analysis - meaning, determinants and types of demand - Elasticity of Demand.	
UNIT II	9
Supply - Meaning and Determinants - Production Decisions - Production Functions - Isoquants, Expansion path - Cobb-Douglas Function. Cost Concepts - cost - output Relationship - Economies and Diseconomies of Scale - Cost Functions.	
UNIT III	9
Market structure - characteristics - Pricing and Output Decisions - Methods of Pricing - Differential Pricing - Government Intervention and Pricing. Cases from Textiles and Apparel Industry.	
UNIT IV	9
Profit - Meaning and nature - Profit policies - Profit Planning and Forecasting - Cost Volume Profit Analysis - Investment analysis.	
UNIT V	9
National Income - Business cycle - Inflation and Deflation - Balance of Payments - Monetary and Fiscal Policies.	

References:

1. Joel Dean, *Managerial Economics*, Prentice Hall/Pearson.
2. Rangarajan, *Principles of Macro Economics*, Tata McGraw Hill.
3. Athmanand.R, *Managerial Economics*, Excel, New Delhi, 2002.
4. P.L.Mehta, *Managerial Economics*, Sultan Chand and Sons, New Delhi, 2004.
5. Peterson Lewis, *Managerial Economics*, Prentice Hall of India, New Delhi, 2002.

DM1308 – ORGANIZATIONAL BEHAVIOUR

Objective: *To understand about one Self, other People and Organizations in terms of behavior with aim of making himself and also others to be more effective in the work place. To provide with models related to Organizational Behavior so as to apply the concepts in understanding every aspect of Organizational Behavior.*

UNIT I	9
Introduction – Management Functions – Roles & Skills with reference to Textile industry – Organizational Behavior - Nature, scope, contributing disciplines to OB, Challenges & Opportunities, OB model – Theoretical frame works Organization Structure - OS of Spinning, Weaving and Processing units – Concepts – Work Design.	
UNIT II	12
Individual Behavior Personality – Determinants – Traits. Learning – definition – theories. Perception – Importance – Process. Values – Importance – Sources – Types - Attitude – Sources – Types - Emotions –	

Emotional Intelligence. Motivation – Theories – Applications – MBO – Reinforcement theory – Participative management - Motivational practices prevailing in Textile units

UNIT III 9

Group Behaviour – Nature of Groups – Defining and Classifying Groups – Structure, process – Group Decision - Making – Team versus Groups – Communication – Functions — Barriers – Leadership – Theories – Styles. Power and Politics - Conflict – Nature and types – Negotiation process in textile industry

UNIT IV 7

Span of Control – Departmentalization - Organization Culture and Climate of Textile Industry - Stress Management – Performance Management – Knowledge Management

UNIT V 8

Organizational Development – Definition – Objectives – Process – Values and Interventions. Organizational Change – Planned Change – Resistance to change with ref. to textile units. Organizational effectiveness, Organizational Behavior in global context

References:

1. Stephen P.Robbins., *Organizational Behaviour*, Prentice Hall India., 10/e, 2003
2. Fred Luthans, *Organizational Behaviour*, Tata McGraw-Hill, 9/e, 2002
3. Hellreigal, *Organizational Behaviour*, Thomson learning., 9/e
4. Uma Sekaran, *Organizational Behaviour*, Tata McGraw-Hill, 2004
5. Aswathappa, *Organizational Behaviour*, Tata McGraw-Hill, 2000
6. LM Prasad., *Organizational Behaviour*, Sultan Chand & Sons

DM1408 – BUSINESS LAW AND ETHICS

Objective: To bring the essentials of important laws governing the business in Indian context such the law of contract, company law, and industrial law. It also provides an opportunity to understand the role of ethics in Business.

UNIT I 9

Introduction - Mercantile Law – Nature of Contract – Offer and Acceptance – Consideration – Free consent – Legality of Object – Void Agreements – Contingent Contract

UNIT II 9

Performance of Contract – Discharge of Contract – Quasi Contract – Remedies for breach of Contract – Special contracts: Indemnity & Guarantee – Bailment and Pledge – Agency.

UNIT III 9

Company Law: Definition – Characteristics – Kinds of companies – Formation – Memorandum of Association – Articles of Association – Prospectus – Membership – Company Management – Meeting and Procedures –Prevention of Oppression and Mismanagement – Winding up

UNIT IV 9

Industrial Law and Labour Law: Factories Act – Workmen’s Compensation Act – Employees Provident Fund and Miscellaneous Act – Employees State Insurance Act – Industrial Disputes Act

UNIT V 9

Ethics and Business: Nature – Ethical Principles – Ethical dilemma in Management – Management Challenges in Private and Public sectors – Ethics in Management Functions and Processes– Ethics in Work – Indian Response – Ethical Code of Conduct. Corporate Governance – An overview.

References:

1. N.D. Kapoor, *Elements of Mercantile Law*, Sultan Chand, 1998.

2. Taxman, *Labour Laws*, Taxman Allied Services – 2004.
3. P. Saravanavel, *Legal System in Business*, Himalaya, 1996
4. Sanjeev Kumar, *Industrial Relations*
5. Manuel G. Velasquez, *Business Ethics*, PHI, 2002.
6. Hartman L. P., *Perspective in Business Ethics*, Tata McGraw-hill, 2/e, 2003
7. Chakroborthy, *Ethics in Management*, Oxford Press
8. Petrick & Quinn, *Management Ethics*, Response Books

DM1508 – ACCOUNTING FOR MANAGERS

Objectives: *The objectives of the course are to enable the students,*

- *Appreciate the usefulness of accounting information in taking financial decision.*
- *Understand the need for and methods of cost accounting with view to achieve cost control and cost reduction in a textile unit.*

UNIT I

14

Accounting – Definition – Purpose – Principles, concepts and conventions – Accounting standards - Preparation of financial statements - Trial balance – Trading account, Profit and Loss account and Balance sheet – Depreciation Accounting (Straight line method and written down value method only) - Final accounts of a Textile unit.

UNIT II

8

Financial Statement Analysis – Comparative statements – Common size statements – Trend percentage analysis – Accounting ratio analysis – Liquidity, activity, leverage, profitability and coverage ratios – Cash flow analysis.

UNIT III

8

Costing – Purpose – Utility of costing – Methods and Techniques of Costing – historical costing , standard costing, process costing, unit costing, batch costing, marginal costing (Concepts only) - Elements of cost – Material cost (Inventory valuation only), labour cost (methods of remuneration only) and expenses – Direct and indirect costs - Allocation, apportionment and absorption of overheads - Cost sheet.

UNIT IV

7

Marginal Costing - Cost volume profit analysis – Break-even analysis – Applications of marginal costing – Pricing decisions, make or buy, sales mix, profit planning etc. Limitations of marginal costing.

UNIT V

8

Budgets and Budgetary Control – Principles, methods and types – Flexible budgeting – Cash budget – Master budget – Zero base budgeting.

References:

1. C. Jeevanandam, *Basic Accountancy*, Sultan Chand & Sons, New Delhi, Second Edition, 2004
2. I.M. Pandey, *Management Accounting*, Vikas Publishing, Third Edition, 2003.
3. M.Y Khan and P.K Jain, *Management Accounting*, Tata McGraw-Hill, New Delhi, Third Edition 2004
4. S.N. Maheswari, *Management Accounting*, Sultan Chand & Sons, New Delhi, Seventh Edition, 2004.
5. T. V. Ratnam, “*Costing in Textile Mills*”, SITRA

DM1608 – MARKETING MANAGEMENT

Objectives: *The course aims to provide with an understand the strategic marketing and the overall marketing discipline, familiar with basic theories, concepts, methods, variables, problems, practices, processes and terminology of contemporary marketing.*

UNIT I	9
Marketing concepts and its roles in modern Textile firms – Consumer Behaviour – Buying Decision Process for fabrics and apparels – Business Buying Behaviour from fibre to fabric – Fibre and Yarn marketing in India - Sales policies of an Indian Textile Company.	
UNIT II	9
Fashion Forecasting and Demand Measurement – Segmentation and Targeting – Strategic Planning – Creating a Competitive Advantage – Positioning Strategy – Differentiation – Product Life Cycle - Marketing Strategies for apparel brands.	
UNIT III	9
New Product in Textiles – Apparel Product Design and Development - Product and Product Mix – Branding and Packaging – Need for Fashion Brands – Latest Trends in Apparel Brand Positioning.	
UNIT IV	9
Developing Pricing Strategies – Marketing Channels – Channel Decisions – Wholesale Marketing and Distribution in fabric and apparel.	
UNIT V	9
Managing Communication - Managing Fashion Advertising, Sales Promotion, Public Relations and Direct Marketing – Sales Force Management - Apparel Retail Marketing – Catalogue Marketing and online marketing – International catalogue and online Apparel Marketing Cases on Domestic and International Textile/Apparel companies.	

References:

1. Kotler Philip, *Marketing Management Analysis, Planning, Control*, New Delhi, PHI, 2004
2. Stanton, W., Miller, K., and Layton, R., *Fundamentals of Marketing*, McGraw-Hill, 2004.
3. Gini, Stephen and Frings, *Fashion: From Concept to Consumer*, Pearson Prentice Hall, 2005.
4. Enis, B M. *Marketing Classics: A Selection of Influential Articles*. New York, McGraw Hill, 1991
5. Kotler, Philip and Amstrong, G. *Principles of Marketing.*, Prentice Hall of India. New Delhi, 1997
6. Ramasamy, V S and Namakumari, S. *Marketing Management: Planning and Contro.*. McMillan, New Delhi 2000
7. Neelamegham, S. *Marketing in India: Cases and Readings*. Vikas.

DM1708 – RESEARCH METHODS AND STATISTICS FOR MANAGEMENT

Objective: *The purpose of this course is to preset an introduction to research and statistical methods as an initial exposure. This paper covers the basic research concepts in the research process and discusses how these concepts relate to decision about conducting specific proposals. It includes, research design, sampling, data collection, analysis and presentation.*

UNIT I	10
Introduction – Statistics in Business Management - Descriptive measures – Basic concepts of probability – Probability Distributions, Sampling and Sampling Distributions – Estimation. - Usage of MS-excel in statistics - Introduction to SPSS package.	

UNIT II	10
Introduction – Meaning of Research, Objectives, Types, Research Approaches - Defining the Research problem – Research Design - Exploratory, Descriptive and Experimentation. Sampling – Meaning, steps in sampling, criteria for selecting sample, characteristics of good sample, sample size determination - Probability and non probability sampling methods – Measurement and scaling - Scaling techniques.	
UNIT III	8
Field work and Data Collection – Primary and secondary – Advantages and Disadvantages – Observation and Interview methods – Questionnaire – Steps in Questionnaire and Schedule preparation. Data Classification & Tabulation - Data Presentation.	
UNIT IV	10
Data Analysis - Hypothesis Testing – Introduction, Procedure, one-tail, two-tail tests – Tests involving a population mean – Errors in hypothesis testing – Chi-Square Test – One way ANOVA – Non Parametric Tests. Regression and Correlation. Applications in Textiles and Apparel Industry.	
UNIT V	7
Report preparation and interpretation - Steps in writing report – Type of reports - essentials of a good report – Oral presentation – Cases on Research Applications in Textiles and Apparel.	

References:

1. Chandan J. S., *Statistics for Business and Economics*, Vikas Publishing, 2002
2. Beri G. C., *Statistics for Management*, Tata McGraw-Hill, 2004
3. Lewin & Rubin, *Statistics for Management*, PHI, 2001
4. P. Kothari , *Research Methodology*, New Age Institute, 2004
5. K. V. Rao, *Research Methodology in Commerce and Management*, 1993
6. Cooper and Schindler, *Business Research Methods*, McGraw-Hill 2003
7. Green and Tull, *Research for Marketing Decisions*, Prentice Hall, 1996
8. Naresh Malhotra, *Marketing Research – An Applied Orientation*, 4/e, Pearson
9. Booth J. E., *Principles of Textile Testing*, Newnes Butterworth, 1996

DM1808 – COMPUTER APPLICATIONS IN BUSINESS

Objectives: *The objective of the course is to impart the basic knowledge in using computers in a business environment and also to get acquainted with the various applications of computers in the whole of textile units.*

UNIT – I	4
FUNDAMENTALS OF COMPUTERS AND OPERATING SYSTEMS	
Evolution of Computers - Organization of Modern Digital Computers – System Architecture – Single-user / Multi-user Operating System – Web Architecture – Communication Protocols.	
UNIT –II	11
OFFICE AUTOMATION	
Word Processing Software – Spread Sheet Package – Presentation Software – Data Base Management System – Other business functional application software.	
UNIT III	30
PRACTICALS	
Use of the above office automation software / packages with business focus.	

References:

1. Ghosh Dastidar, Chattopadhyay and Sarkar, *Computers and Computation - A Beginner's Guide*, Prentice Hall of India, 1999.

9. Nelson, *Microsoft Office 97*, Tata McGraw-Hill, 1999.
10. Taxali, *PC Software for Windows Made Simple*, Tata McGraw-Hill, 1999.
11. Winston, *Practical management science Spreadsheet modeling and applications*, Thomson learning 2001.
12. Namrata Agrawal, *Financial Accounting using Tally*, Dreamtech press, New Delhi, 2002.
13. Carver, *Doing Data analysis with SPSS 10.0*. Thomson learning 2001.

DM2108 – APPAREL PRODUCTION TECHNOLOGY

Objective: *The objective of the course is to make students gain knowledge on various techniques involved in different stages of manufacturing of apparels.*

UNIT I	9
Apparel industry in India, size, nature and competitiveness - Classification of Apparels - Apparel production planning and control: apparel production & control parameters, lead-time planning. Product development: Steps from prototype to production model – Importance of pre-production activities – Product data management: Understanding and interpretation of specification sheet – Determination of machine requirements for new factory	
UNIT II	12
Basic Pattern Making: Measurement taking – Size chart and meaning of sizes – Definition of various garment parts and positions – Drafting: Basic principles used to draft standard size block patterns for men, women and kids wear, viz., shirts, pants, skirts, blouses, jackets, children dresses – Drafting of sleeve and collar – Computer grading- Computerized production pattern making – Hardware, software and system programming to produce a sample production pattern – Computer aided manipulation of pattern pieces to create individual styles	
UNIT III	6
Introduction to spreading and cutting – Types and functions – Spreading and cutting machines – Developments in spreading and cutting including computer aided machines	
UNIT IV	10
History of sewing machines development – Sewing machinery Classification - Concept of sewing machinery functions -Stitch and Seam Classification – Sewing needle and sewing thread specification, thread consumption - Planning a logical garment construction sequence - Sewing problems and their remedies.	
UNIT V	8
Construction techniques of garment closures: Application of zippers – fly, kissing, lap; Button and buttonholes, hooks and eye snaps, Velcro; Garment Pressing equipment and its developments	

Reference

1. Jacob Solinger., *Apparel Manufacturing Handbook* , VanNostrand Reinhold Company (1980).
2. Carr.H, Latham. B., *The Technology of Clothing Manufacture* , Blackwell Scientific Publication (1988).
3. Cooklin Gerry, *Garment Technology for fashion designers*, Blackwell Publishing, 1997
4. Peyton B .Hudson, *Guide to Apparel Manufacturing* , MEDI Apparel Inc (1989) ISBN: 0 -945116-08-X.
5. Sukumar K, *Knitting and apparel manufacture* , , SSMITT
6. Stephen Gray, *CAD / CAM in clothing and Textiles*, Gower Publishing Limited, 1998
7. W.Aldrich, *CAD in clothing and Textiles*, Blackwell Science 2nd edition, 1992, ISBN: 0-63 -3893 – 4

DM2208 – APPAREL MERCHANDISING

Objective: *The basic objectives of the course are to provides the students with understanding of and appreciation for the impact of global production and distribution of apparel, the ability to plan, develop, and merchandise apparel product lines and to evaluate apparel quality, an understanding of the role of dress and fashion in their lives of others and an understanding of the design, manufacture, scouring, costing, retailing, and consumption of apparel products.*

UNIT I	7
Introduction to Merchandising – Definition and concepts - Scope of merchandising management- Responsibilities of Merchandisers- Traits of Merchandiser- Merchandising in Indian Textile industry	
UNIT II	8
Merchandising Organization – Structure of the merchandising function – Managing relation of merchandising with other departments – Value chain analysis-Fashion Merchandising – Fashion terminology – Fashion cycle – Factors affecting fashion – Fashion adoption theories.	
UNIT III	8
Merchandising planning and control: marketing plan and merchandising plan- Merchandising calendar as a planning and control tool- Marketing research for the merchandiser - Sales analysis – Customer-attitude tracking- profitability control- Production analysis – Sales estimation – Break-even and contribution analysis	
UNIT IV	12
Line Development: principles and technologies- Line development process- Product Development – sources of design and product ideas -Idea generation for styling and design- Elements and principles of design —Sketches – Pricing Strategies- Pricing policy and decision: company pricing objectives and policy - Pricing constraints- Product line pricing- pricing and the fashion cycle- Costing principles - Quality- standards and specification–Responsibilities of merchandiser for quality-Inspection and sampling procedures.	
UNIT V	10
Material sourcing and decision: material source evaluation, role of merchandiser-factors in sourcing decision- single sourcing vs. multiple sourcing- vendor analysis and valuation- domestic and international sourcing process-Buyer-seller negotiation: preparation for negotiation- Sample preparation- Story board-Mood board - Meeting phase- Post negotiation control	

References:

1. Jermy A. Rosenau, Devid A. Wilson, *Apparel Merchandising: the Line Starts Here*, Fairchild, 2001
2. Grace I. Kuntz, *Merchandising: Theory, Principal & Practices*, Fairchild, 2000
3. Dickerson, K.G. & Jarnow, J., *Inside the Fashion Business*, Prentice-Hall, 6th ed, 2004
4. Frings, C.S., *Fashion: From Concept to Consumer*, Prentice Hal, 8th ed., 2005.

DM2308 - QUANTITATIVE TECHNIQUES

Objective: *The Objective of this course is to familiarize the students with basic Statistical and Operations Research Techniques to assist in Business Decision Making with reference to Textiles and Apparel Industry.*

UNIT I	9
QT – Introduction – Measures of Central Tendency – Mean, Median, Mode. Mathematical Models – Deterministic and Probabilistic – Simple Business examples – OR Progressions.	
UNIT II	9

Optimization Models – Linear Programming – Formulation – Graphical solution – Simplex – solution.
Transportation Model – Initial Basic Feasible solutions – Optimum solution for non – degeneracy and degeneracy model – Trans-shipment Model – Assignment Model – Traveling Salesmen problem.

UNIT III 9

Probability – Definitions – Addition and Multiplication Rules (only statements) – Simple Business application problems – Probability Distribution – expected value concept – Theoretical Probability Distributions – Binomial, Poisson and Normal – Simple problems applied to business.

UNIT IV 9

Decision Theory – Pay off tables – Decision criteria – Decision trees. Inventory Models – deterministic – EOQ – EOQ with Price Breaks – Probabilistic Inventory Models - Probabilistic EOQ model.

UNIT V 9

Game theory- Zero Sum games: Arithmetic and Graphical Method. PERT and CPM –Simple problems in Project Management.

References:

1. *Statistics for Management* – Richard L Levin & Daid S Rubin
2. *Statistical Methods* – S P Gupta
3. *Operations Research* – Kanti Swarup, Gupta and Man Mohan
4. *Operations Research* – Dr. J.K. Sharma Macmillan Indian Ltd.
5. U.K. Srivastava, G.V. Shenoy, S. C. Sharma, *Quantitative Techniques for Managerial Decision*, Second Edition, Prentice Hall of India
6. *Statistics for Behavioral and Social Sciences* - Chadha, N.K. Reliance Publishing House, Delhi.

DM2408 - FINANCIAL MANAGEMENT

Objective: To implication of business decisions on the finances of the business entity and the methods of managing finance effectively to achieve corporate goals.

UNIT I 10

Objectives of Financial Management – Nature and scope – Time value of money – Valuation of securities: Equity, Debt and Preference shares – Risk and return – Capital asset pricing model.

UNIT II 8

Capital Expenditure: Capital appraisal methods – Traditional and discounted cash flow techniques – Capital appraisal under conditions of uncertainty.

UNIT III 7

Financing function – Cost of capital – Capital structure determination – Operating and financial leverages – Sources of long term funds-TUF scheme.

UNIT IV 10

Working capital management – Working capital policy – Determinants of working capital – Management of cash, inventory and debtors – Finance for Working Capital.

UNIT V 10

Impact of tax on Financial Management – Introduction to Corporate tax, Excise, customs, VAT as applicable to Textile units.

References:

1. IM Pandey, *Financial Management*, Vikas Publishing, Ninth Edition, 2005.
2. Prasanna Chandra, *Financial Management*, Tata McGraw-Hill, Seventh Edition 2007.

3. M.Y. Khan & P.K. Jain. *Financial Management*, Tata McGraw-Hill, Fifth Edition 2007
4. James C. Van Horne , *Financial Management & Policy*, Prentice Hall India Ltd., Twelfth Edition, 2003.

DM2508 – STRATEGIC MANAGEMENT

Objective: *The objective of this paper is to provide the new, current real world business situation and strategies which will help the students in shaping the critical skills needed to plan and manage strategic activities. This paper covers the strategic management process and techniques that aid strategic analysis, decision making, implementation and control.*

UNIT I	8
Nature and value of Strategic Management – Levels – Characteristics – Corporate strategic planning – Vision, Mission and Objectives of various Textile units – Strategic planning process – Merit and Limitations of strategic planning – Strategic leadership – Corporate Governance and Social Responsibility in the Textile units.	
UNIT II	10
Environment Analysis: General Textile Environment, Competitive Environment Analysis. Internal analysis of firm – Assessing internal environment through functional approach and value chain – Identifying critical success factors for a Textile unit – SWOT analysis of Textile sectors – Portfolio analysis – Scenario planning. Cases from Textiles and Apparel.	
UNIT III	10
Strategy formulation: generic strategies – Strategies of leading Textile companies – diversification – Means and forms – Strategic Management at corporate, business and functional levels with special reference to Textile companies operating in India.	
UNIT IV	10
Concepts and tools of strategy evaluation: competitive cost dynamics – Experience curve – BCG matrix – IA-BS matrix – A.D. Little life cycle approach – Assessment of economic contribution to strategy – Cost of equity capital – M/B model – Assessing market value of a Business – Profitability Matrix – Divestiture decision.	
UNIT V	7
Strategic implementation and control: various approaches – Commander, Organization Change, Collaborative, Cultural and creative approach – Matching Organization Structure with strategy – Control model and other quantitative and qualitative tools – Steps– Porter’s Approach to Globalization – Future of Strategic Management.	

References:

1. Pearce and Robinson, *Strategic Management*, All India travelers, 1998
2. Certo and Peter, *Strategic Management*, McGrawhill, 1997
3. Gregory Dess and Alex Miller, *Strategic Management*, McGraw-Hill, 1996
4. Thompson and Strikeland, *Strategic Management*, Tata McGraw hill, 2004
5. Khazmi A., *Business Policy and Strategic Management*, Tata McGraw-Hill, 2004
6. Ramakumari and Namakumari, *Strategic Planning*, MacMillan, 2002

DM2608 – HUMAN RESOURCE MANAGEMENT

Objectives: *To create interest among students to learn the best ways to manage the people working within organizations.*

To provide the knowledge on effective HR Policies to Acquire, Develop and Retain the Human Resources of any Organizations

UNIT I

7

Human Resource Management – Meaning, nature – Objectives, scope and functions - Evolution of Human Resource Management – The Importance of the Human Factor – Role of HRM executive in the Textile units – Human Resource Policy Framework in Textile Industry – HRM department with ref. to Textile Industry.

UNIT II

10

Human Resource Planning: Manpower planning at National and Enterprise level – Forecasting – Job analysis, Job description and Job specification with ref. to Textile Industry – Absenteeism and labor turnover. (Cases in the Textile Industry)

UNIT III

10

Recruitment policy in textile units - Internal and External Sources – Methods – Selection policy and process – Selection tests – Psychological testing – Tests used in textile industry – Placement – Job changes – Promotion - Transfers – Demotion - Separation – HR audit – HR accounting.– Recruitment and selection practices in the textile industry an Analysis.

UNIT IV

8

Training– Need – Process – Planning Training Programs - Types of Training Methods –Management Development Programs – Objectives – Process – Techniques and methods – Evaluation – Common training practices prevailing in the Textile Industry.

UNIT V

10

Work load and Work Assignments in textile industry – Wage and salary administration – Principles and techniques of wage fixation – Job Evaluation - Methods – Incentive schemes in textile industry – Performance Appraisal – Meaning – Methods and Techniques – Requisites of good Appraisal plan – Performance Evaluation - Feedback – Textile Industry practices.

References:

1. Decenzo and Robbins, *Human Resource Management*, Wiley, 6th edition, 2004.
2. Biswajeet Pattanayak, *Human Resource Management*, Prentice Hall of India, 2001.
3. Johnm.Ivancevich *Human Resource Mngement*Tata McGrawhill 10th Edition
4. Mamoria C.B. and Mamoria S., *Personnel Management*, Himalaya Publishing Company, 2005.
5. Dessler G. , *Human Resource Management*, Pearson Education Limited, 2004.

DM2708 – ECONOMIC ENVIRONMENT OF TEXTILE INDUSTRY

Objective: *To familiarize the students with the impact of external environmental factors on business decisions.*

UNIT I

6

Business and its Environment – Economic, Social, Political and Legal environments – Social Responsibility of business – Importance of Textile Industry – Structure and reforms of Textile industry in India.

UNIT II

10

Micro economic environment – Demand and its determinants – Law of demand – Elasticity of demand - Theory of Firm, Profit maximization, Sales maximization, Organizational Slack, Ownership and control

Market structure and pricing – Competition, Monopoly, Monopolistic Competition and Oligopoly Markets.

UNIT III 10

Demand Forecasts - Macro economic aggregates and Concepts - GDP, GNP, Price Indices, WPI, CPI, Inflation, Marginal Analysis. Cases from Textile and Apparel Industry

UNIT IV 10

Macro Economic Environment – National Income – Business Cycles – Economic policies – Monetary and fiscal policy – National Textile Policy. -

UNIT V 9

International Trade Environment – Commercial policies – Balance of payments – Exchange rates – Foreign exchange markets

References:

1. R L Varshney and K L Maheswari, *Managerial Economics*, Sultan Chand & Sons, New Delhi, Eighteenth Edition, 2004.
2. K Aswathappa, *Essentials of Business Environment*, Himalaya Publishing House, New Delhi., 2003
3. S K Misra and V K Puri, *Economic Environment of Business*, Himalaya Publishing House, New Delhi, First Edition, 2004.
4. M Adhikary, *Economic Environment of Business*, Sultan Chand & Sons, New Delhi, Seventh Edition, 2003.

2808 - SUMMER PROJECT

Students will undergo summer project after second semester.

DM 2908 PROJECT MANAGEMENT

Objective : To equip the students with skills needed in generation of project ideas, identify resources for them and scientific methods of project implementation.

UNIT I 10

Determination of objectives – Generation of project ideas – Preliminary screening – Preparation of project report – Market and Demand analysis – Technical analysis – Financial analysis and forecasts.

UNIT II 10

Project Appraisal Techniques and criteria – Capital Appraisal methods – Estimation of cash flows – Capital structure – Cost of capital – Risk analysis – Social cost benefit analysis.

UNIT III 9

Project Implementation – Forms of Project organisation – Project Management and control – PERT and CPM – Project clearances.

UNIT IV 10

Project Financing – Sources of project finance – Domestic and International sources – Subsidies and other schemes of Government – Appraisal by banks and Financial institutions.

UNIT V 6

Project review – Post implementation audit – Role of computers in project management.

References:

1. Dr Prasanna Chandra, *Projects*, TMH, Sixth Edition, 2006
2. P. Gopalakrishnan and V.E. Ramamoorthy, *Text Book of Project Management*, Macmillan, 1993
3. P.K. Joy, *Total Project Management*, Macmillan, Second Edition, 1994

DM3108 – QUALITY CONTROL IN TEXTILES

Objective: *The objectives are :*

- *To study test procedures involved in yarn fabric and garment evaluation.*
- *To know the details of defects in fabric quality and their remedial measures.*
- *To learn about ISO and various statistical tools used for quality control in textile industries.*

UNIT I	12
Classification and Tabulation of Data, Construction of Frequency Diagram and its applications- Quality- Measure of dispersion, Mean and standard deviation, co-efficient of variation- Quality control charts for variables and attributes – Acceptance sampling – AQL – Test of Significance Quality Assurance – ISO 9000 Quality System.	
UNIT II	7
Concept and Application of Fiber Quality Parameters of natural (Length, strength, fineness, maturity, moisture and trash) and man-made fibers (Length, strength, fineness and crimp) – Fiber Quality Index and its relation with yarn strength and evenness.	
UNIT III	8
Quality parameters of spun (Count and Strength and its CV %, Evenness, imperfection, hairiness, Classimat faults) and filament yarns (Count and Strength and its CV %, evenness) – Yarn testing concept application.	
UNIT IV	10
Quality parameters of woven and knitted fabrics – Principle and concept of Physical testing of fabrics – Fabric handle – Fabric Inspection – Fabric defects – Fabric grading system.	
UNIT V	8
Garment quality parameters – Quality control in pattern making, cutting and stitching – Quality of trims and accessories – Quality control in garment finishing – Defects in garments.	

Reference:

1. J.E. Booth, *Principles of Textile Testing*, Newnes Butterworth, 1996
2. B.P. Saville, *Physical Testing of Textiles*, The Textile Institute, 2002
3. A. J. Chutter, *Quality management in Clothing Industries*, The Textile Institute, 2002
4. T.E. Ratnam and K. P. Chellamani, *Quality Control in spinning*, SITRA, 1999
5. Arindam Basu, *Textile Testing*, SITRA, 2001

DM3208 - TEXTILE COSTING

Objective: *The objective is to introduce the methods of cost ascertainment and cost control especially in a textile unit.*

UNIT I	10
Cost Accounting : Introduction-Preparation of Cost Sheet-Cost centers in a Textile Mill- Overhead Classification, Allocation and Apportionment- Problems-Process cost accounting in Textiles – Process loss, waste or scrap – Normal and abnormal loss. Job order Costing and its application in Garment industry. Marginal Costing technique for decision making.	
UNIT II	10
Costing in Spinning Mills – Elements of cost – Ascertainment of Clean Cotton Cost –Cost Statements-Quantity and value of total cotton/ Man-made fiber issued- input, wastage and output in each processing cost center up to yarn stage- Net Mixing Cost- Waste multipliers for each cost center mixing wise- Cost	

Centre-wise conversion cost- Selling price of various wastes. Power cost estimation- Yarn realisation statement- Decision making using Contribution per frame shift among various counts of yarn production.

UNIT III 10

Costing in Weaving–Elements of cost Calculation of Yarn requirements for weaving –computation of value loss and net realisation- Cost Statements– Cost centre-wise conversion cost from winding to weaving -Sort-wise cost of production of Grey Cloth- sort-wise stock accounting of Grey cloth- Cost of Sizing material-Cost of sales of cloth sold in grey stage and sales realization

UNIT IV 10

Costing in Knitting and Garments– Elements of cost –Calculation of garment weight of different sizes, Dia determination, Setting the knitting program, Dyeing program-Consumption of fabric per garment- Estimating of cost of process loss in Compacting, Bleaching, Raising, Shearing, Printing and Dyeing. Estimating the Knitting rates- Calculation of CMT charges. Cost sheet with Profit margins and foreign quotes.

UNIT V 5

New concepts in costing – Activity based costing – Target costing – Cost restructuring issues and Cost Reduction Measures in the textile industry.

References:

1. Shinn William, *Elements of Textile Costing*, E, 1995.
2. Varma H.K., *Costing in Textile Industry*, Printice Hall Inc., 1992.
3. Raman, T.V ,*Cost control and costing in spinning mills*, MIR Pub, Moscow 1983.
4. Robin Looper and Regine Salgmolder, *Target Costing and Value*, 1997.
5. M.Y.Khan & P.K. Jain, *Cost Accounting*, Tata Mcraw Hill, New Delhi, 3rd Edition, 2003
6. Faculty hand outs and worked out problems.

DM3308 – LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Objective: *To learn the strategic importance of good supply chain design, planning, and operation for every firm, to convey how supply chain drives may be used on a conceptual level during supply chain design, planning and operation to improve performance, to give the student knowledge of logistics and supply chain methodologies, to understand how logistical decisions impact the performance of the firm as well as the entire supply chain.*

UNIT I 8

Introduction – Concept – Components – Features – Current scenario in Textile industry – Drivers and obstacles-Value Chain Management in Textile – Design of Supply Chain network – Supply Chain Networks for apparel products.

UNIT II 10

Demand planning: Demand forecasting- Planning Supply and Demand – Measurement of demand for apparels and its impact on Textile Industry - Inventory Management – Cycle Inventory - Safety Inventory - Optimal level of product availability.

UNIT III 10

Purchase planning – Make or buy decision – Indigenous and global sourcing – Development and Management of Suppliers – Negotiating for Purchasing /sub contracting – Purchase insurance – Evaluation of purchase performance Manufacturing Scheduling – Manufacturing flow system – Material handling systems for Textile and Apparel manufacturing - Ware housing and store keeping.

UNIT IV	8
Logistics Management – Role of logistics in SCM – Integrated logistics Management – Transportation Design and Decision – Impact on the lead time for Textile & Apparel supply – Third party logistics services and providers – Facilities management – Logistics and Customer Service.	
UNIT V	9
Pricing and Revenue Management in supply chain – Coordination in supply chain Information Technology and SCM – E-commerce and supply chain – Bar coding – RFID – Best practices in Supply Chain Management Cases from Textiles and Apparel Industry.	

References:

1. S. Chopra and Mendil, *Supply chain management, strategy, planning and operation*, Pearson Education, Asia, 2/e, 2004
2. B.S. Sahay, *Supply Chain Management, For Global Competitiveness*, Macmillan India Limited, 1999.
3. G. Raguram and N. Rangarajan, *Logistics and Supply Chain Management, Cases and concept*, Macmillan India, 2004

DM3408 – BUSINESS COMMUNICATION

Objectives:

- *To Learn and understand the importance, various forms, the process and the effective tools of communication in Business.*
- *To develop the competency in written, oral communication skills, and presentation skills of the students related to business.*

UNIT I	6
Introduction to Business Communication – Meaning and significance – Types – Barriers – Principles of effective communication Style of business writing – Business letters, routine, bad news, sales, collection and application – Memorandum.	
UNIT II	15
Individual; Presentation on Business topics relevant to Textiles and Apparel-Video Feedback. Group Discussions. Seminars aimed at improving presentation skills. Individual feedback on Scope for improvement to be provided by Faculty and internal assessment components awarded on presentation skills. Tips on Facing Interviews.	
UNIT III	8
Principles of non-verbal communication and their application to clothing styles and body language - Speeches, introduction, thanks, occasional and thematic - Dialoged communication - Interviews, selection, appraisal, discipline - Group communication - Structured and unstructured.	
UNIT IV	8
Internal and External Communication of an organization - Components of organizational communication – Report writing - Structure of reports - Presentation skills - Effective use of audio-visual media .Cases from Textiles and Apparel.	
UNIT V	8
Conducting Meetings – Procedure – Preparing agenda - Minutes of meetings – resolutions – Conducting seminars and conferences – Procedures of regulating group discussions.	

Reference:

1. Lesikar, et al, *Lesikar Basic Business Communication* 9TH Edition, Tata McGraw-Hill publishing company, New Delhi – 2002.

2. Scot Ober, *Contemporary Business Communication* 5th Edition, Indian adaptation, Biztantra, New Delhi -2004.
3. Rajendra Paul & Korlahalli *Essential of Business Communication*, 9th Edition Sultan Chand & Bros, New Delhi – 2002. Reprint – 2003.
4. Asha Kaul, *Effective Business Communication*, PHI New Delhi ,2000

DM3508 - INTERNATIONAL TRADE PROCEDURE AND DOCUMENTATION

Objective: *To acquaint the students with the current regulations and procedures relating to execution of international trade and the incentives and finance available in India for exports.*

UNIT I	9
International Trade Contracts: Forms and important clauses – Terms of trade based on Incoterms and Methods of Payment – Letters of credit: Types and operation – Role of Uniform Customs and Practices	
UNIT II	9
International Trade Documents – Commercial and regulatory documents: Bills of Exchange, transport documents, invoices and certificates- Marine insurance.	
UNIT III	10
Excise duty procedure for exports - Export and import procedure under customs – Shipping bill and bill of entry. – FEMA regulations relating to exports and imports.	
UNIT IV	10
Foreign Trade Policy – Import facilitation and export incentive schemes under Foreign Trade Policy applicable to Textile Industry – Status holders, SEZs and other zones.	
UNIT V	10
Export Credit from banks in India: Pre-shipment and post shipment credit in rupees and foreign currency – Export Credit Insurance.	

References:

1. C. Jeevanandam, *International Business*, Sultan Chand and Sons, New Delhi, First Edition, 2008.
2. Nabhi's *Exporters Manual and Documentation*, Nabhi Publishers, New Delhi, 28th Edition, 2007.
3. D.C. Kapoor, *Export Management*, Vikas Publishers, New Delhi, First Edition, 2005.
4. GOI, *Foreign Trade Policy*, Annual Publication.

DM 4108 – FINISHING AND PROCESSING OF TEXTILES

Objective: *The objective of the course is to make the student understand the process involved in the finishing and processing segments of the value chain in Textiles from Management perspective.*

UNIT I	10
Preparatory processes of woven fabrics – Singeing – Desizing – Scouring – Bleaching – Mercerizing – Heat setting – quality & process control – flow chart – machineries	
UNIT II	10
Classification of dyes – Theory of dyeing – Banned dyes and chemicals – Water quality & analysis – Dyeing of cotton- Dyeing of polyester – Dyeing of blends – Wool and Silk dyeing – Yarn dyeing – Woven fabric dyeing – Knit fabric dyeing – Dyeing machinery- Waste water treatment – Quality & Process Control – Computer Color Matching.	
UNIT III	10
Finishing of Woven fabrics – Finishing of Knitted fabrics – Tubular and Open width finishing – Chemical finishing like optical brightening – Stiff finish – Soft finish- Anti static finish – Anti Bacterial finish –	

Water proofing – Soil release finish – Mildew & Moth proofing – Resin finish – Anti shrink finish – Mechanical finishes like raising – Sueding & other surface effects.

UNIT IV 10

Garments dyeing – Washing – Stone washing – Acid washing – Enzyme washing – Biopolishing – Bleaching – Laser & Ozone fading – Garment processing machinery.

UNIT V 5

Stain removal – Care labels – Defect analysis – Modern Developments in Chemical Processing – State & Modernisation of Textile Chemical Processing industry – Product Evaluation & Profiling.

References :

1. E.R. Trotman, *Dyeing and Chemical Technology of Textile Fibres*, B I Publications, 1994
2. V.A. Shenai *Technology of Textile Processing, Chemistry of Dyes and Principles of Dyeing*, Sevak Publications, 1997
3. J.T. Marsh *Textile Science*, B.I. Publications, 1979
4. J.T. Marsh *Introduction to Textile Finishing*, B.I. Publications, 1979
5. Sukumar K *Knitting and apparel manufacture*, SSMITT
6. Jacob Solinger., *Apparel Manufacturing Handbook* , VanNostrand Reinhold Company (1980).
7. Peyton B .Hudson, *Guide to Apparel Manufacturing* , MEDI Apparel Inc (1989) ISBN: 0 -945116-08-X.
8. Carr,H, Latham. B., *The Technology of Clothing Manufacture* , Blackwell Scientific Publication (1988).

DM4208 – MANAGEMENT INFORMATION SYSTEMS

Objective: *To introduce the concept of Corporate Information System.*

UNIT I 9

Information Systems – introduction - establishing the framework - business models – information system architecture – evolution of information systems.

UNIT II 9

System Development - modern information system – system development life cycle – structural methodologies – designing computer based methods, procedures, control, and designing structured programs.

UNIT III 9

Information Systems - functional areas, finance, marketing, production, personnel – levels, DSS, ESI, ES – comparison, concepts and knowledge representation – managing international information system. – Textile Industry Cases.

UNIT IV 9

Implementation and Control - control – testing security – coding techniques – detection of error – validating – Cost Benefit analysis – Assessing the value and risk of information system.

UNIT V 9

System Audit - Software Engineering Qualities – Design, Production Service, software specification, software metrics, software quality assurance – System Methodology – Objectives – Time and Logic, knowledge and human dimension – software life cycle models – verification and validation.

Reference

1. Kenneth C. Laudon and Jane Price Laudon, *Management Information Systems - Managing the Digital Firm*, Pearson Education, Asia, 2002.
2. Gardan B. Davis, *Management Information System Conceptual Foundations, Structure and Development*, McGraw-Hill, 1974.
3. Joyce J Elam, *Case Series for Management Information Systems*, Simon and Schuster Custom Publishing, 1996.
4. Steven Alter, *Information Systems – A Management Perspective* – Addison – Wesley, 1999.
5. James A O’Brein, *Management Information Systems*, Tata McGraw-Hill, New Delhi, 1999.
6. Turban, Mc Lean and Wetherbe, *Information Technology for Management – Making Connection for Strategic Advantage*, John Wiley, 1999.
7. Ralph, M. Stair and George W. Reynolds, *Principles of Information Systems – A Managerial Approach*, Thomson Learning, 2001.

DM 4308 – TECHNICAL TEXTILES MANAGEMENT

Objective: *The objective is to impart thorough knowledge on various technical textile materials and their activities with a focus on Management.*

UNIT I	7
Technical Textiles – Various types – Fibres for Technical Textiles – Conventional Fibres – High Performance Fibres – High Function Fibres – High Tenacity and High Modulus Fibres – High Chemical and Combustion Resistant Fibres – Inorganic Fibres.	
UNIT II	8
Fabric Manufacturing for Technical Textiles – Wove, Warp Knitted, Weft Knitted, Non-woven structures – Directionally Oriented Structures – Finishing of Technical textiles – Flame Retardant treatment – Water Repellant finishes – Anti-microbial finishes – Fibres suitable for thermal and flame protection – Coating of Technical Textiles – Coating techniques.	
UNIT III	10
Protective Textiles – Thermal Insulation Textiles – Water Proof/Vapour Permeable Textiles – Flame Retardant, Heat Protective Textiles – Ballistic Protective Textiles – Protective Textiles for Chemical, Micro-biological and Radiation Hazards – Textiles in Defense – Requirements of Military Textiles – Military combat clothing – Camouflage Textiles – Textiles in Transportation – Tyre cords and fabrics – Textiles in passenger cars – Textiles in other vehicles – Textiles in Railways, Aircrafts and Marine Applications – Medical Textiles – Fibres used – Non-implantable Textiles – Implantable Textiles – Textiles for Extracorporeal Devices – Healthcare / hygiene products, Textiles for Hospital wards.	
UNIT IV	10
Textiles in Filtration – Dust collection principles, Fabric construction and requirements – Solid-liquid separation, Fabric construction and requirements – Textile in Paper Making Industry – Geotextiles – Functions of Geotextiles – Fibres used – Woven, Knitted and Non-woven Geotextiles – Mechanical and Filtration Properties of Geotextiles – Geotextiles from Natural Fibres – Application of Geotextiles for Soil reinforcement, drainage, Filtration, Separation, Erosion control.	
UNIT V	10
Textiles in Sports and Recreation – Textiles in Construction – Textiles in Agriculture – Conveyor Belts – Power Transmission Belts – Hoses – Tarpaulins – Textiles for Footwear – Sewing threads – Textile Reinforced Composite Materials – Woven, Knitted, Stitched fabric composites – Matrix Materials – Textile Performs – Smart Textiles.	

References:

1. A.R.Horrocks and S.C.Anand, *Handbook of Technical Textiles*, Woodhead Publishing
2. S.Adanur, Wellington Sears Handbook of Industrial Textiles, Technomic Publishing
3. S. Mukhopadhyay, *High Performance Fibres*, Textile Progress, Vol.25, No.3/4, Textile Institute.
4. J.W.S. Hearle, *High Performance Fibres*, Woodhead Publishing.

DM4408 - ENTREPRENEURSHIP DEVELOPMENT

Objective: To create an interactive learning experience that addresses the challenges, issues, and reward faced by entrepreneurs in starting and growing a venture. This provides a more practical and road map defining entrepreneurial strategic process and skills students require for real world business practices. It emphasizes the entrepreneurial process, SSI, developing ideas and business opportunities, preparing marketing, production, financial and HR plans and the role of government in helping entrepreneurs.

UNIT I

9

Entrepreneur – Definition – Characteristics – Entrepreneur styles and types - Entrepreneurs Vs Managers - Entrepreneurial scene in India – Entrepreneurial growth in the Textile sector – Case histories of Textile entrepreneurs - Analysis of Entrepreneurial Potential - Women Entrepreneurs.

UNIT II

9

Entrepreneurship and SMEs in Textile industry - Importance - Comparison of large/small firms with reference to policy, strategy/ structure and operation – Characteristics – Weaknesses – strengths – Challenges - Pitfalls and salient features of small business - Ways to enter – types - Legal forms of ownership in small business.

UNIT III

9

Project management – Phases of project - Project classification - identification - Sources of Business idea – Market Research - Estimating Market potential choosing the product and size of operation - Location and site selection – Technical Feasibility.

UNIT IV

8

Project Formulation and Presentation - Data Collection and Analysis - Contents of project report - Principles of Report Writing - Techniques of presentation - Project feasibility report preparation and evaluation criteria.

UNIT V

10

Sources of funds - Preparing the financial plan - Role of Banks and Promotional Agencies - Interaction sessions with officials from financial institutions like TIIC, SIDCO, SISI and DIC - Incentives for small industry – Statutory obligations (types and number of clearance needed) - Support and subsidies available to textile business - Backward area reservations and reservation of items exclusive for textile business – Environmental and social compliances required.

Reference:

1. P.Saravanavel, *Entrepreneurship Development*, Himalaya Publishing, 1997
2. Vasant Desai, *Problems and Prospects of Small Scale Industries in India*, Himalaya Publishing, 2004
3. Hisrich, *Entrepreneurship*, Tata McGraw-Hill, 2004
4. Anna, Martin, Joseph, *Entrepreneurial Textile Communities*, Chapman & Hall, 1993

DMT108 – PRODUCTION AND OPERATIONS MANAGEMENT

Objective: *The objective is to strategically towards approach the activities at managerial levels involved in manufacturing processes.*

UNIT I	10
Introduction to Production and Operations Management – System approach of POM – Production System - Products and Services – POM functions – Operation Strategies – Competitive priorities of Textile industry – Productivity – Productivity Improvement	
UNIT II	10
Demand Forecasting – Delphi method – Moving Averages – Exponential Smoothing – Simple Regression and Correlation analysis – Production Planning and Control in Textile industry – Aggregate planning – Master production schedule – Material requirement planning – Bill of Material – Capacity requirement planning – Introduction to ERP.	
UNIT III	10
Inventory Management – Types of Inventory – Cost of Inventory – Fixed Order Quantity Systems – Fixed Order Period Systems – Economic Order Quantity – Other Inventory models – ABC in Inventory classification – JIT in manufacturing – Kanban.	
UNIT IV	10
Manufacturing operations scheduling – Work centers – Work centre scheduling – Sequencing – Priority Rules and Techniques – Shop floor Control – Facility layout – Process layout – Product layout – Line Balancing – Cellular layout	
UNIT V	5
Job Design – Considerations in Job design – Work method analysis – Work Measurement – Time study – Work sampling – Work loads in textile manufacturing	

References:

1. R.B. Chase, F.R. Jacobs and N.J. Aquilano *Operation Management for Competitive Advantage*, Tata McGraw-Hill, 2004
2. N. Gaither and G. Frazier *Operation Management*, Thomson Asia, 2004
3. Martin K. Starr *Production and Operation Management*, Biztantra, 2004
4. E.S Buffa and R.K. Sarin *Modern Production / Operation Management*, John Wiley & Sons, 2003
5. J. E. Evans and W. M. Lindsay *The Management and Control of Quality*, Thomson South-Western, 2005
6. N.G. Nair *Production and Operation Management*, Tata McGraw-Hill, 2003
7. S.A. Chunawala and D.R. Patel *Production and Operations Management*, Himalaya, 2004

DMT208 MATERIALS MANAGEMENT IN TEXTILES

Objective: *The key objective of this course is to acquaint the students with decision making for effective and efficient purchase, storage and flow of materials in manufacturing and service organizations; Cost reduction techniques in prepurchase, purchase and post purchase systems; Modern material planning and delivery systems like MRP and JIT and Material handling and Logistics systems with focus on Textile and Apparel Industry.*

UNIT I	9
Role of Purchasing and Materials management – Objectives , Organization and Interrelationships , Determination and Description of Material Quality, Material Planning in Push and Pull Systems ,MRP and JIT .	

UNIT II	9
Determination and Description of Material Quality-Receiving and Incoming Quality Inspection, Acceptance Sampling Plans, Vendor process capability; Cost reduction Techniques-Standardization, Simplification and Variety Reduction; Value Analysis and Engineering	
UNIT III	9
Make or Buy Decision, Purchasing Research , Sources of Supply, Price Determination and Negotiation, Vendor Rating, Selection and Development, Legal aspects of Purchasing ;Public purchasing and Tendering ; International Purchasing- Procedures and Documentation; Purchasing of Capital equipment- Appraisal Methods, Evaluating Supplier's Efficiency.	
UNIT IV	9
Stores Layout, Classification and Codification; Material Logistics- Warehousing Management, Material Handling : Cases from Textile and Apparel Industry	
UNIT V	9
Traffic and Transportation, Disposal of Scrap, Surplus and Obsolete materials; Inventory control of spare parts, Materials Information System.	

References:

1. Ansari .A. and Modarress.B., *JIT Purchasing*, Freepress,.
2. Baily P. etc. *Purchasing Principles and Management*, Pitman
3. Burt, David.N. *Proactive Procurement*. Engelwood Cliffs, New Jersey, PHI.
4. Dobler,D.W. etc. *Purchasing and Materials Management*, New York, Mcgrawhill.
5. Farrington .Band Waters, Derek.W. *Managing Purchasing*, London, Chapman and Hall
6. Dutta, A.K. *Integrated Materils Management*, New Delhi,PHI.
7. Gopalakrishnan .P. and Sundershan.M. *Handbook of Materials Managemen* , New Delhi, PHI.

DMT308 PROCESS CONTROL MANAGEMENT

UNIT I	9
Introduction: Definition and scope of process control in spinning and weaving. Control of mixing quality and its cost-Linear programming with Illustrative examples. Control of waste and Cleaning in blow room and carding-Assessing the performance, Industry norms- Locating and improving machines with sub standard performance	
UNIT II	9
Control of Yarn quality: Count, strength and variability-Within bobbin and between bobbin variation-Assessing the process variability- Control of variability- Norms. Unevenness and Imperfection and its control- Records and reasons accounting - Norms. Control of outgoing yarns. Productivity Analysis: Computation of productivity Indices-Use of norms on productivity achievable with existing machinery and modern machinery	
UNIT III	9
Process control in winding: Quality optimization- Control of productivity-Norms. Process Control in pirn winding: Improving build of the pirn-control of productivity. Process control in warping: performance-minimizing end breakage – warp beams quality-control of productivity-Norms	
UNIT IV	9
Process control in sizing: Control of size pick-up, stretch, moisture and quality of beams-control of productivity- Control of size loss-Norms. Drawing and warp tying: control for reducing the incidence of extra ends on the weaver's beam. Productivity control in Loom Shed: Efficiency-Performance-relation between loom allocation and loom efficiency-snap study and machine interference.	

UNIT V

9

Control of common shuttle and shuttleless loom grey fabric defects. Hard waste control: computing the standards of hard waste- control of waste in ring frame, winding, warping, sizing, drawing-in, pirn winding, loom shed. Analysis of rejected bobbins / pirns.

References:

1. Garde A R and Subramanian T A, *Process Control in Spinning*, ATIRA, Ahemdabad, 1978
2. Paliwal M C and Kimotghy PD, *Process Control in weaving*, ATIRA, Ahemedabad, 1983
3. *BTRA Silver Jubilee Monographs*, BTRA, Bombay, 1981
4. *Norms for spinning mills* by SITRA, Coimbatore, 2004
5. *Norm for Textile Industy* by ATIRA, SITRA, BTRA, NITRA

DMT408 ENERGY MANAGEMENT AND POLLUTION CONTROL IN TEXTILE INDUSTRY

Objective: *The Objective is to enable the students acquire knowledge about the basic concepts in every management & Pollution Control.*

UNIT I

10

Introduction to energy management – need for energy conservation – Demand side management – Energy Consumption of textile machinery – Specific Energy Consumption (UKG) – Cost of energy vs. sales value of textile products

UNIT II

15

Energy Conservation in textile industry – Energy conservation in lighting, compressors and boilers – Energy Audit in a textile mill – Captive generation and different types of fuels – Non conventional energy Sources – Co-generation

UNIT III

10

Types of effluents produced by textile industry – Effluent treatment processes – Recent developments like Reverse Osmosis – Concept of zero discharge

UNIT IV

5

Water quality and test methods – Quality requirement of process water and drinking water – Water Pollution – Effluent standards of pollution control boards – Solid water management

UNIT V

5

Environment pollution and Industrialisation – Environment impact assessment and environment management systems – Air Pollution – Air pollution control and equipments in industry – Air quality monitoring – Noise pollution

References:

1. Kalyanaraman A.R., *Energy Conservation in Textile Industries*, SITRA, 1985.
2. Shri Vastava, *Environmental Education*, Kanishika, 2004
3. G.R. Chhatwal, *Encyclopedia of Environmental waste Pollution*, Publisher, Anmol, 1997
4. 4. Matcalf and Essy *Wastewater Engineering Treatment and Reuse*, Publisher, TMA, 2004
5. 5. Yogesh T. Jasrai and Arm Arya, *Air Pollution Development at what Cost?*, Daya Publisher, 2003
6. R.K. Trivedi, *An Introduction to Air Pollution*, A.B.D., 2003

DMT 508 FABRIC STRUCTURE AND DESIGN

Objective: To impart knowledge on various woven and knitted fabric structures / designs, their graphical representation

UNIT I	9
Elements of woven design: Construction of elementary weaves, its draft and peg plan– plain – warp rib- weft rib – mat. Twills – modification of twills. Satin – sateen and their derivatives- Crepe weaves- Huck a back and honey comb.	
UNIT II	9
Color theory: light and pigment theory – modification of color – color combination – application of colors – color and weave effects. Extra warp and extra weft figuring. Basic Dobby and Jacquard Design	
UNIT III	9
Symbolic (Graph paper) & Diagrammatic representation of stitches-Knit Stitch, float stitch, Tuck stitch - Basic stitches - Primary structures – Courses, Wales, Stitch length – Single jersey structures – Double jersey structures – Striping – Simple colour stitch designs –	
UNIT IV	9
Ornamentation of rib structure 2X2 rib structure, half cardigan, Full cardigan, derivatives of Inter lock structures; Eight lock, Ponte-di-Roma, Ottoman rib, Bourrelet, Texi- pique. Pin-Tuck. Milano rib, French Pique, Swiss Pique.	
UNIT V	9
Representation of warp knit structures. Point Paper, Chain-Link Notation, single fabrics: Chain stitch, Tricot lap, Extension of 1 and 1 lapping, Full tricot, Lock Knit, Reverse Lock Knit, satin, Loop raided fabrics, Queen’s cord, Sharkskin, Blind lap, Marquisette,.	

References

1. Grosicki Z., *Watson’s Textile Design & Color: Elementary weaves & Figure*, Blackwell Science, Commerce place, 1998.
2. Grosicki Z., *Watson’s Textile Design & Colour: Elementary weaves & Figure*, Blackwell Science, Commerce place, 1998.
3. H.Nisbet, *Grammar of textile Design*, Tarporevala sons & Co. Pvt. Ltd., 1994.
4. W.S. Murphy, *Textile weaving & Design*, Abhishek Publications, 2000.
5. Ajgaonkar, D.B, *Knitting Technology*, Universal Publishing Corporation, Bombay, 1998.

DMF108 - WORKING CAPITAL MANAGEMENT IN TEXTILE INDUSTRY

Objective: The objective is to provide an in depth study of managing the working capital of a textile unit so as to strike a right balance of liquidity and profitability.

UNIT I	7
Concept of working capital – Importance of working capital management – optimal level of working capital – Alternative financing strategies – Assessment of working capital requirements – Components of working capital.	
UNIT II	10
Managing cash and liquidity – Motives for cash – Objectives of cash management - Forecasting cash flows – uncertainty in forecasting – Investment in marketable securities – Models for determining optimum level of cash balance.	
UNIT III	10
Receivables management – Formulation of receivable policy – Marginal analysis – Credit evaluation and analysis – Management of Trade credit.	

UNIT IV	10
Inventory management – Classification and coding – Cost of holding inventory – Inventory control models – Inventory valuation.	
UNIT V	8
Sources of finance for working capital – Bank credit – Assessment of working capital by banks - Commercial paper – Factoring	

References:

1. V.K. Bhalla, *Working Capital Management*, Anmol Publishers, New Delhi, Fourth Edition, 2004.
2. M. Srinivasan, *Working Capital Management*, Macmillan, New Delhi, 2001.
3. V. Ramamoorthy, *Working Capital Management*, IFMR, Chennai, 1984.
4. Hrishikesh Bhattacharya, *Working Capital Management*, Macmillan, New Delhi, 2001.

DMF208 - INTERNATIONAL FINANCIAL MANAGEMENT

Objective : *The objective of the course is to expose the students to the opportunities available international financial markets to expand business & improve the bottom line and manage the associated risks effectively.*

UNIT I	8
Meaning of international Finance – International exchange rate regimes – Role of IMF – Exchange rate of rupee – Currency convertibility.	
UNIT II	8
Foreign exchange markets – Features and participants – Exchange rates – Spot and forward rates – Determination of exchange rates – Determination of forward margin.	
UNIT III	10
Instruments in Foreign Exchange Market – Forwards, futures and options. – Interest rate risk: FRAs, interest rate options and swaps.	
UNIT IV	9
Foreign Exchange Exposure and Management – Transaction Exposure – Translation Exposure – Economic Exposure.	
UNIT V	10
International Working Capital Management and capital budgeting - Sourcing funds from abroad – Advantages and precautions - ADR and GDR issues – External Commercial borrowing.	

References:

1. P.G. Apte, *International Financial Management*, Tata McGraw Hill, New Delhi, Fourth Edition, 2007.
2. C. Jeevanandam, *Foreign Exchange and Risk Management*, Sultan Chand and Sons, New Delhi, Tenth Edition, 2007.
3. A.C. Shapiro, *Multinational Financial Management*, Prentice Hall, New Delhi, Seventh Edition, 2007.
4. V.K. Bhalla, *International Financial Management*, Anmol Publishers, New Delhi. Fifth Edition, 2006.

DMF308 - SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Objective: To familiarize the students on the modes of selecting investment opportunities, and analysing the securities for investment

UNIT I	5
Investment setting - Securities - Securities Market - Sources of investment information - Security Contract regulation Act.	
UNIT II	10
Valuation of Securities: Equity - Preference shares - Debt instruments - Hybrid securities - Asset pricing theories - CAPM - APT - Portfolio theory - Option pricing theory.	
UNIT III	10
Economic Analysis - Economic forecasting and stock Investment Decisions -Forecasting techniques. Industry Analysis - Industry classifications. Economy and Industry analysis. Industry life cycle - Evaluating Industry relevant factors - External industry information sources.	
UNIT IV	10
Company Analysis: Measuring Earnings - Forecasting Earnings - Applied valuation techniques - Graham and Dodds investor ratios value investing. Technical Analysis: Fundamental Analysis Vs Technical Analysis - Charting methods - Market Indicators - Trend - Trend reversals - Patterns	
UNIT V	10
Portfolio - Construction - Performance Evaluation - Portfolio revision.	

References:

1. *Investment Management and Portfolio Analysis* - Reilly.
2. *Fundamentals of Investing* - Gitman
3. *Security Analysis* - Graham and Dodd
4. *Modern of Security Analysis and Portfolio Management* - Fuller and Farvell.
5. *Security Analysis and Portfolio Management*- Fischer and Gordon

DMM108 - RETAILING MANAGEMENT

Objective: *The objectives are to critically analyse the retailing process, the environment within which it operates, and the institution and functions that are performed and to develop the knowledge useful for retail decision making.*

UNIT I	9
Introduction to Retailing – Retailing Management Decision Process - Types of Apparel Retailers - Characteristics - Multi-Channel Retailing - Customer Buying Behavior	
UNIT II	9
Retail Market Strategy – Strategic Retail Planning Process - Branding Strategies - Financial Strategy – Strategic Profit Model - Retail Locations – Shopping Centers – City or Town Locations - Factors affecting the Attractiveness of a Site - Site Selection for apparel and fabrics stores - Human Resource Management – Retail Organization Structures – Managing the Store – Recruiting and Selecting Store Employees - Motivating Retail Employees	
UNIT III	9
Information Systems and Supply Chain Management in Textile Retailing – Customer Relationship Management (CRM) – Collection and Analysis of Data, Developing and Implementing CRM Programs – Bar coding and RFID - Planning Apparel Merchandise Assortments – Category Management – Merchandise Plan – Assortment Planning Process	

UNIT IV	9
Buying Systems – Buying Merchandise — International Sourcing Decisions for Textiles – Connecting and Negotiating with Textile Vendors – Relationships with Vendors – Apparel Pricing – Strategies – Approaches to set the Prices - Retail Communication Mix	
UNIT V	9
Controlling Costs – Reducing Inventory Loss – Apparel showroom Management - Store Layout, Design, and Visual Merchandising - Customer Service – Service Quality - New trends in Apparel Retailing. Cases on domestic and international apparel retail companies.	

References:

1. Michael Levy, Barton A Weitz, *Retailing Management* , 5/e, Tata McGraw-Hill
2. Berman, Evans, *Retail Management: A Strategic Approach*, 7/e, Prentice Hall.
3. Ellen Diamond, *Fashion Retailing: A Multi Channel approach*, I/e, Prentice Hall 2005.
4. Mary Fances, Drake, Janice Harrison spoone, and Herbert Green wald, *Retail Fashion Promotion and Advertising*, prentice Hall, 1992.
5. James Ogden and Deuse Ogden, *Retailing: Integrated Retail Management*, Houghton Mifflin, 2005.

DMM208 - ADVERTISING AND SALES PROMOTION

Objectives : *The aim of the paper is to acquaint the students with concepts, techniques and give experience in the application of concepts for developing effective advertising and Sales Promotion programme for Textiles/apparel industry.*

UNIT I	9
Objective Setting and Market Positioning ; DAGMAR Approach – Determination of Target Audience; Building of Advertising Programme – Message, Headlines, Copy, Logo, Illustration, Appeal, Layout.	
UNIT II	9
Campaign Planning - Media Planning - Budgeting; Evaluation – Rationale of Testing Opinion and Aptitude Tests – Recognition - Recall - Experimental Designs.	
UNIT III	9
Advertising Organisation – Selection Compensation and Appraisal of an Agency - Electronic Media Buying Advertising campaign – Advertising V/s Consumer behaviour - Sales promotion- Role of Creative Strategies.	
UNIT IV	9
Sales Promotion and Marketing Mix; Nature and Types of Sales Promotion; Consumer Behaviour and Sales Promotion - Deal Prone Consumer - Economic Theories of Promotion.	
UNIT V	9
Sales Promotion’s Impact on Sales; Evaluation of Sales Promotion Experiments - Retailer Promotion Planning Process; Substantive findings and issues on coupons - Trade Dealings - Retail Promotions.	

References:

1. Aaker David. A etc. *Advertising Management* 4th edition, New Delhi, Prentice Hall of India, 1995.
2. Bolgh Geroge E and Bolgh Michael *An introduction to Advertising and Promotion*, 3rd edition, Chicago, Uwin.
3. Borden Williams H. *Advertising* New York, John Wiley, 1981.
4. Hard Norman, *The Practice of Advertising* Oxford, Butterworth Heinemann , 1995.
5. Kieppner, Otte, *Advertising Procedure* , Englewood Cliffs, New Jersey, Prentice Hall Inc, 1988

6. Ogilvy, David, *Ogilvy on Advertising* London, Longman 1983.
7. Sengupta, Subreto *Brand Positioning Strategies for Competitive Advantages*, New Delhi, Tata McGraw Hill, 1995.
8. Ailloni and Charas, Dan. *Promotion; A Guide to Effective Promotional Planning, Strategies and Executions*. New York, John Wiley, 1984.
9. Assael , Henry, *Consumer Behaviour and Marketing Action*, Boston Kant, 1987.
10. Blattberg , Robert C and Scott, A Nosin, *Sales Promotion: Concept, Methods and Strategies*, Englewood cliffs.
11. Schaltz Don E and Willam, A Robinson *Sales Promotion Management*, Chicago, Crain Books, 1982.
12. Strang, Roger A. *The promotional Planning Process*, New york, Praeger, 1980.
13. Totten John C and Block, Martin P *Analysing Sales Promotion; Text and Cases*, Chicago, Commerce Communication 1987.
14. Ulanoff, Stanley M. *Handbook of Sales Promotion*, New York, Mc Graw Hill, 1985.

DMM308 - CUSTOMER RELATIONSHIP MARKETING

Objective: ▪ *The objectives are to provide an understanding of the theory and practices of Customer Relationship Marketing (CRM) and their impact in an organisation.*

- *To familiarize the role of Information Technology in CRM.*

UNIT I	9
The Domain and Conceptual Foundations of Relationship Marketing - The Evolution of Relationship Marketing - The UK Perspective - The IMP Perspective - The Nordic School Perspective	
UNIT II	9
Relationship Marketing in Consumer and Mass Markets - Relationship Marketing and Distribution Channels - Integrated Model of Buyer-Seller Relationships - Strategic Alliances	
UNIT III	9
Membership Customers and Relationship Marketing - Affinity Partnering - Relationship Marketing and Key Account Management - Supplier Partnering	
UNIT IV	9
Customer Profitability Analysis and Design Issues - Relationship Marketing and Marketing Strategy - The Evolution of Relationship Marketing Strategy within the Organization - Organizing for Relationship Marketing	
UNIT V	9
Information Technology and its Role in Building, Maintaining and Enhancing Relationships. Cases on CRM of various domestic and international Textile firms.	

References:

1. Jagdish Sheth and Atul Parvatiyar, *Hand Book of Relationship Marketing*, Sage Publications, 1999.
2. Brown. S, *Customer Relationship Management*, John Wiley & Sons, 2000.
3. Stone,M. Woodcock, N. and Machtynger, *Customer Relationship Marketing* Kogan Page Ltd., London, 2000.
4. McKenna, R *Relationship Marketing: Successful Strategies for the Age of the Customer*, Perseus Press, New York, 1993.
5. Egan, John, *Relationship Marketing: Exploring Relational Strategies in Marketing*, Prentice Hall, New Jersey, 2001.

DMM408 - BRAND MANAGEMENT

Objective: To facilitate the students to understand the basic concepts related to Branding in Textiles industry and empower them with the knowledge to develop and maintain the brand portfolios of the Textiles companies.

UNIT I	9
Introduction to Branding, Brand identity, Brand Image, Brand Personality, Brand Loyalty and the connected issues	
UNIT II	9
Brand Positioning, Repositioning, Brand Equity: Conceptualization and Measurement.	
UNIT III	9
Mega marketing, Product-market strategies for Indian Brands against Foreign Brands and Private levels.	
UNIT IV	9
Brand portfolio management, Brand extension, Line Extensions, Brand harvesting strategies, Share building strategies.	
UNIT V	9
Organizing the Brand Management systems: Role of product managers, Brand Managers. Trends in Brand Management: Brand cult, Brand alliances – Co-branding, Destination Branding. Cases on brands and Private Labels.	

References:

1. Kapferer, Jean-Noel. *Strategic Brand Management*. Kogan Page India Limited: NewDelhi, 2000.
2. K.S. Chandrasekhar, *Product Management-Text and Cases*, Himalaya publishing house, 1st edition,2002.
3. YLR Moorthi, *Brand Management- The Indian Context*, Vikas Publishing House, 1999.
4. Subroto Sengupta , *Brand Positioning Strategies for competitive advantage*, Tata McGraw-Hill, 1990
5. S.A. Chunnawala, *Product Management*, Himalaya Publishing Home, First Edition, 1998.

DMM508 – INTERNATIONAL MARKETING

Objective: To address global issues and concepts relevant to all International Marketers, regardless of the extent of their international involvement, understanding marketing practices of a large and small companies which are seeking market opportunities outside the home country and to learn the procedures of exporting from India.

UNIT I	9
Framework of International Marketing - Scope of International Marketing - Emerging Global Textile scenario - Gains from International Trade – India’s position in a global Textile Markets - International Marketing vs Domestic Marketing	
UNIT II	9
Transition from Domestic to International Business – Pre-Export behaviour – Motivation to export – Special difficulties in International Marketing – Barriers in International Textile Markets.	
UNIT III	9
International Marketing Environment - Controllable and uncontrollable factors - International marketing decisions – Market selection decision – International markets for Textiles - Market entry decision - Marketing mix decision.	
UNIT IV	9
International Research and Segmentation - Developing Global Textile products and pricing - International Promotion and Advertising – Trade shows – Fashion shows – Buyer-seller meets - International Distribution Systems.	

UNIT V

9

WTO – GATT – MFA & ATC – UNCTAD – Trade blocks – Customs union – Regional trade grouping and cooperation – EU – Preferential Trade Areas – Free Trade Associations - World Trade in services - Counter trade – World commodity markets – Indian Textile industry after the year 2005

Reference:

1. Philip R. Cateora, John L. Graham, *International Marketing*, 11/e, McGraw-Hill
2. Warren J. Keegan., Mark Green, *Global Marketing*, Prentice Hall, 1999
3. Varshney, RL and Bhattacharya B., *International Marketing: Indian Perspective*, Sultan Chand and Sons, New Delhi, 1999
4. Foreign trade policy, Govt. of India, 2005
5. Jeevanandam, C. et al., *International Economics*, Sultan Chand & Sons, 2005.

DMM608 – CONSUMER BEHAVIOUR

Objective: To provide a conceptual base for understanding the behaviour of consumers within the marketing system in a society with a even balance of basic behavioural concepts, research finding and applied marketing examples.

UNIT I

9

Introduction to the study of consumer behavior – Lifestyle and Fashion Trends - Consumer needs and Motivation – Measurement of motives and motives for Fabric and Apparel purchase- Personality theories and consumer diversity - Self image – Impact on fabric and apparel purchase

UNIT II

9

Consumer perception – Dynamics, Consumer Imagery and Perceived risk – Learning – Behavioural learning theories and cognitive learning theories – Brand loyalty – Impact on fabric and apparel purchase - Models of attitudes – Attitude formation and change for dressing styles – Analysis of customer fashion preferences and trends - Fashion change and consumer acceptance - Designing persuasive communication for fabrics and apparels

UNIT III

9

Group concept - Family concept – Family life cycle – Gender relations, clothing, and appearance - Social class – Measurement – Affluent and non affluent consumer – Social meaning of clothes - Culture – Characteristics and Measurement of Culture – Subcultures – Nationality, religious, geographic, racial and age – cross-cultural consumer analysis – impact of culture on clothing

UNIT IV

9

Opinion leadership – Process and measurement – Opinion leadership and firm’s promotional strategies – Diffusion process – Adoption process – Fashion adoption theories - Profile of consumer innovator – Consumer decision making – Models – Dress sense consumer decision making process for clothing

UNIT V

9

Public policy and consumer protection – Deceptive Advertising – Consumer Education – Consumer Research – Building Relationships with Consumers

References:

1. Leon G. Schiffman and Leslie Lazar Kanuk, *Consumer Behavior* , Prentice Hall India, sixth edition, 2004
2. David L. Loudon, Albert J. Della Bitta, *Consumer Behavior: Concepts and Applications*, McGraw-Hill, Sixth Edition, 2004
3. Gini, Stephen and Frings, *Fashion: From Concept to Consumer*, Pearson Prentice Hall, 2005.

4. Solomon , Michael .R., *Consumer Behaviour*, Prentice Hall, 6th edition, 2005
5. Reading Material supplied by the instructor on cases, journal and magazine articles.

DMH108 - HUMAN RESOURCE DEVELOPMENT

Objectives: *The objective of this paper is to understand the contemporary conceptual frame work of human resource development so as to facilitate in devising of appropriate strategies for the organisation which will result in the delivery of organisational goals individual goals. It covers the topics namely concept an philosophy of HRD, HRD systems, HRD Strategies, T&D, performance appraisal and organisation change and climate.*

UNIT I	7
Introduction to the concept and philosophy of HRD – Meaning – Scope – Nature- Importance – Difference between traditional personnel management and HRD- Concept of human resource system – functions – Role of HRD in Textile Industry.	
UNIT II	10
Analysis the role of development – Matching the role; recruitment and placement – Assessment centre – Task analysis – Job analysis – Key result area – Key performance area – Critical Attributes – Competence mapping – HR Score card with ref. to textile unit.	
UNIT III	10
Individual development – Conceptual frame work – Importance of training – Identification of training needs – Designing training programs – Selection of training methods – Techniques of training – Evaluation and follow up – Role of supporting institutions in textile training.	
UNIT IV	8
Developing the person in the role; performance appraisal – Objectives – 360 appraisal – Performance review and counseling – Potential appraisal and development – Career planning and development – Mentoring – HR practices in textile industry.	
UNIT V	10
Organisation change and organisation development – Goals – Phases- Interventions – Organisational culture – HRD climate – Organisational effectiveness – HRD experience in Indian Textile Industry – HR trends in Textiles.	

References:

1. Udai Pareek and T.V Rao, *Designing and Managing Human Resource System*, Oxford, 1998.
2. T.V. Rao, *Human Resource Development*, Sage Publications, 2002
3. Chakraborty S.K. *Human Resource Development* Wiley – Eastern, 1990
4. Singh U.B. *Human Resource Development*, Rawat, 1992.
5. Dessler G., *Human Resource Management*, Prentice Hall, India, 2004.

DMH208 - LABOUR WELFARE AND INDUSTRIAL RELATIONS IN TEXTILE INDUSTRY

Objective: *The objective of this paper is to highlight the importance of Labour Welfare and Industrial Relations and also to provide the contextual and constitutional framework of Industrial Relations. Concepts namely Labour welfare, industrial relations, trade unionism, industrial disputes, collective bargaining & workers participation in management will be discussed further.*

UNIT I	9
Labour welfare – Need – Principles – Concepts – Statutory measures – Labour Welfare Officer - Critical analysis on welfare measures in Textile Industry - Recommendations of National Commission on Labour - International labour Organization – Labour welfare practices and VRS in textile industry.	

UNIT II	9
Industrial Relations – Concepts and systems – IR in Private and Public sector undertakings in India – Causes for poor IR – Industrial sickness with reference to Textile Industry – IR in Indian Textile Industry.	
UNIT III	7
Trade Unionism – Theory - Policy – Structure – Types – Indian Trade Union movement – Strength and weaknesses with reference to Textile Industry.	
UNIT IV	10
Industrial Disputes – Causes – Handling and settling disputes – Industrial Dispute settlement machinery - Bipartite and Tripartite consultative machinery - Employee grievances – Steps in grievance handling	
UNIT V	10
Collective Bargaining – Concept – Procedure – Conditions for effective collective bargaining - Workers Participation in Management - Levels of Participation –Limitations	

References:

1. Ahuja.K.K. *Industrial Relations Theory & Practice* Ludhiana, Kalyani Publishers, 1990
2. R. Venkatapathy and Assissi Menachery – *Industrial Relations and Labour Legislation* – Aditya Publishers,2000
3. Mamoria C.B. and Satish Mamoria, *Dynamics of Industrial Relations*, Himalaya Publishing House, New Delhi.,2000
4. Arun Monappa., *Industrial Relations*, Tata McGraw-Hill Book Company, New Delhi, 2005
5. 5. Tripathy, *Personnel Management and Industrial Relations*, Sultan Chand, 2004

DMH308 – EMPLOYMENT LAWS

Objective: *This paper is designed to serve the need of the students in understanding the employment related legislations. The comprehensive coverage includes the laws relating to working condition, social security, wages and industrial relations.*

UNIT I	9
Working Conditions: Factories Act, 1948- Appendices Act 1961- Contract Labor Regulations and Abolition Act, 1971	
UNIT II	9
Social Security: The Workman’s Compensation Act, 1923 — The Employee’s Provident Funds and Miscellaneous Provisions Act, 1952	
UNIT III	9
Social Security: The Employee’s State Insurance Act, 1948. The Payment of Gratuity Act, 1972 – The Maternity Benefit Act, 1961	
UNIT IV	9
Wages: The Payment of Wages Act, 1936 - The Minimum Wages Act, 1948 – The Payment of Bonus Act, 1965	
UNIT V	9
Industrial Relations: The Industrial Disputes Act 1947 - The Industrial Employment (Standing Orders) Act, 1946 - The Trade union Act, 1926	

References:

1. N.D. Kapoor, *Mercantile Law*, Sultan Chand and Sons,2004
2. R. Venkatapathy and Assissi Menachery, *Industrial Relations and Labour Legislation*, Aditya Publishers, 2000

3. P.Saravanel, *Legal system in Business*, Himalaya publications.
4. Mamoria C.B. and Satish Mamoria, *Dynamics of Industrial Relations*, Himalaya Publishing House, New Delhi
5. N.D. Kapoor, *Handbook of Industrial Law*, Sultan Chand and Sons,1994

DMI108 E – BUSINESS IN TEXTILES

Objective: *To inculcate students with the latest technology enabled services and their management in the Textile Industry.*

UNIT I 9
 E-Business Technology - principles – potential – data warehousing - networking infrastructure – software tools – IP, TCP, HTTP, HTML - consumer interface technologies – OLAP and data mining – case studies.

UNIT II 9
 E-Commerce Management – Net Centrism – Navigation – Digital design – Web metrics – Various Business models – Hyper markets – Intelligent agents – Auctions – Design, Protocol – case studies w. r. t. Indian Textile Companies.

UNIT III 9
 Application of e-business in different sectors of the Industry - multidisciplinary approach to e-business viz. SCM, CRM etc. and their effectiveness, – case studies.

UNIT IV 9
 Security and Encryption – Abuse and Netiquette – Internet Governance – Economics of e-business – Equilibrium price – Electronic marketing – E-business – road map for success – case studies.

UNIT V 9
 E-Business – Legal issues - Software intellectual property law – Contract law for e-business - Warranties and new products – Cyber law issues – Privacy and trans-border flows, Fraud – security of information and risks – Electronic highway robbery – Consumer protection – case studies.

Reference

1. Kalakota and Whinston, *Frontiers of Electronic Commerce*, Addison Wesley, 2001.
2. Efraim Trubon, Jae Lee, David King, H. Michael Chung, *Electronic Commerce, A Managerial Perspective*, Pearson Education Asia, 2001.
3. Nabil R. Adam, Oktay Dogramaci, Aryya Gangopadhyay and Yelena Yesha - *Electronic Commerce*, Amazon, 1999.
4. Nabil R. Adam and Oktay Dogramaci, *Electronic Commerce, Technical Business and Legal Issues*, Prentice Hall USA, 1998.
5. Doernberg, Richard L and Hinnekens Luc, *Electronic Commerce and International Taxation*, Peachpit Press, USA, 1996.
6. Greenstein Firsman, *Electronic Commerce*, Tata McGraw-Hill, 1999.
7. Charless Trepper, *E-Commerce Strategies*, Microsoft, Eastern Economy Edition, 1999.
8. Napier, Judd, Rivers and Wagner, *Creating and Winning E-Business*, Thomson Learning, 2000.

DMI208 - ENTERPRISE RESOURCE PLANNING IN TEXTILE INDUSTRY

Objective: To introduce the students with the concepts in enterprise wide planning and the integrative approach in management.

UNIT I	9
Enterprise Resource Planning - principle – ERP framework - business blue print – business engineering Vs business process re-engineering – tools – languages – value chain – supply and demand chain – extended supply chain management – dynamic models – process models.	
UNIT II	9
Technology and Architecture - client / server architecture - technology choices – internet direction – evaluation framework – CRM – CRM pricing – chain safety – evaluation framework.	
UNIT III	9
ERP System Packages - SAP, People soft, BAAN and Oracle - comparison – integration of different ERP applications – ERP as Sales force automation – integration of ERP and Internet – ERP implementation strategies – organisational and social issues.	
UNIT IV	9
Oracle - overview – architecture – aim – applications – Oracle SCM, SAP – overview – architecture – applications – before and after y2k – critical issues – study on various modules of ERP packages – including ERP on the net.	
UNIT V	9
ERP Procurement Issues – market trends – outsourcing ERP – economics – hidden cost issues – ROI – analysis of cases from Indian Textile companies.	

Reference

1. Alexis Leon, *ERP Demystified*, Tata McGraw – Hill Publishing Company Ltd., New Delhi, 2002.
2. Brady *Enterprise Resource Planning*, Thomson Learning, 2001.
3. Sadagopan, *S.ERPA Managerial Perspective*, Tata McGraw-Hill, 2001.
4. Jose Antonio Hernandez, *The SAP R/S Handbook*, Tata McGraw-Hill, 2001.
5. Vinod Kumar Crag and Bharat Vakharia, *Enterprise Resource Planning Strategy*, Jaico Publishing House, Mumbai, 1999.
6. ERPWARE, *ERP Implementation Framework*, Garg and Venkatakrisnan, Prentice Hall of India Pvt. Ltd., 1999.
7. Vinod Kumar Crag and N.K. Venkatakrisnan, *Enterprise Resource Planning*, Prentice Hall of India Pvt. Ltd., New Delhi, 2001.

DMI308 - DATA BASE MANAGEMENT SYSTEM

Objective: To introduce the concept of Corporate Database Management System.

UNIT I	9
Introduction, The Database Environment, types : Relational Databases, Object Databases, Basic SQL, Data types, Operators. File processing - development process	
UNIT II	9
E-R Modeling, Relational Database Model, Normalization.	
UNIT III	9
Physical Database Design, Introduction to SQL.	
UNIT IV	9

Data and Database Administration, Client/Server and Databases, Security, Backup and Recovery - Creating users, Encrypting Traffic, Backup of the Database, Recovery.

UNIT V

9

Distributed databases, Data warehousing

Reference Books:

1. Jeffrey A. Hoffer, Mary B. Prescott and Fred R. Mcfadden, *Modern Database Management*, 7th Edition. by Prentice Hall.
2. Fred R. McFadden and Jaffrey A Hoffe, *Database Management – The Benfamin / Cummings Publishing Company*.
3. David Kruglinski, Orborne, *Data Management System – McGrawhill Publication*.
4. Henry F. Korth and Abraham Silbersehatz, *Database System Concepts – McGraw-Hill Book Company*.

DMA108 – PRODUCTION AND OPERATIONS MANAGEMENT

Objective: *The objective is to strategically towards approach the activities at managerial levels involved in manufacturing processes.*

UNIT I

10

Introduction to Production and Operations Management – System approach of POM – Production System - Products and Services – POM functions – Operation Strategies – Competitive priorities of textile industry – Productivity – Productivity Improvement

UNIT II

10

Demand Forecasting – Delphi method – Moving Averages – Exponential Smoothing – Simple Regression and Correlation analysis – Production Planning and Control in textile industry – Aggregate planning – Master production schedule – Material requirement planning – Bill of material – Capacity requirement planning – Introduction to ERP

UNIT III

10

Inventory Management – Types of Inventory – Cost of Inventory – Fixed Order Quantity Systems – Fixed Order Period Systems – Economic Order Quantity – Other Inventory models – ABC in Inventory classification – JIT in manufacturing – Kanban.

UNIT IV

10

Manufacturing operations scheduling – Work centers – Work centre scheduling – Sequencing – Priority Rules and Techniques – Shop floor Control – Facility layout – Process layout – Product layout – Line Balancing – Cellular layout

UNIT V

5

Job Design – Considerations in Job design – Work method analysis – Work Measurement – Time study – Work sampling – Work loads in textile manufacturing

References:

1. R.B. Chase, F.R. Jacobs and N.J. Aquilano *Operation Management for Competitive Advantage*, Tata McGraw-Hill, 2004
2. N. Gaither and G. Frazier *Operation Management*, Thomson Asia, 2004
3. Martin K. Starr *Production and Operation Management*, Biztantra, 2004
4. E.S Buffa and R.K. Sarin *Modern Production / Operation Management*, John Wiley & Sons, 2003
5. E. Evans and W. M. Lindsay *The Management and Control of Quality*, Thomson South-Western, 2005

6. N.G. Nair *Production and Operation Management*, Tata McGraw-Hill, 2003
7. S.A. Chunawala and D.R. Patel *Production and Operations Management*, Himalaya, 2004

DMA208 – FABRIC STRUCTURE AND DESIGN

Objective: To impart knowledge on various woven and knitted fabric structures / designs, their graphical representation

UNIT I	9
Elements of woven design: Construction of elementary weaves, its draft and peg plan– plain – warp rib- weft rib – mat. Twills – modification of twills. Satin – sateen and their derivatives- Crepe weaves- Huck a back and honey comb.	
UNIT II	9
Color theory: light and pigment theory – modification of color – color combination – application of colors – color and weave effects. Extra warp and extra weft figuring. Basic Dobby and Jacquard Design	
UNIT III	9
Symbolic (Graph paper) & Diagrammatic representation of stitches-Knit Stitch, float stitch, Tuck stitch - Basic stitches - Primary structures – Courses, Wales, Stitch length – Single jersey structures – Double jersey structures – Striping – Simple colour stitch designs –	
UNIT IV	9
Ornamentation of rib structure 2X2 rib structure, half cardigan, Full cardigan, derivatives of Inter lock structures; Eight lock, Ponte-di-Roma, Ottoman rib, Bourrelet, Texi- pique. Pin-Tuck. Milano rib, French Pique, Swiss Pique.	
UNIT V	9
Representation of warp knit structures. Point Paper, Chain-Link Notation, single fabrics: Chain stitch, Tricot lap, Extension of 1 and 1 lapping, Full tricot, Lock Knit, Reverse Lock Knit, satin, Loop raided fabrics, Queen’s cord, Sharkskin, Blind lap, Marquissette,.	

References

1. Grosicki Z., *Watson’s Textile Design & Color: Elementary weaves & Figure*, Blackwell Science, Commerce place, 1998.
2. Grosicki Z., *Watson’s Textile Design & Colour: Elementary weaves & Figure*, Blackwell Science, Commerce place, 1998.
3. H.Nisbet, *Grammar of textile Design*, Tarporevala sons & Co. Pvt. Ltd., 1994.
4. W.S. Murphy, *Textile weaving & Design*, Abhishek Publications, 2000.
5. Ajgaonkar, D.B, *Knitting Technology*, Universal Publishing Corporation, Bombay, 1998.

DMA308 – SMART TEXTIELS

Objective: To familiarize the students with advanced technologies in garments

UNIT I	5
Definition of Smart Textiles - The Evolution of Smart Textiles - The Functions of Smart Textiles	
UNIT II	5
Smart Suits - Smart Suits of the Future - Mechanical Actuators International Fashions Machines Heat balance and thermo-physiological comfort.	

UNIT III	10
Phase change technology. PCM in textiles. PCM in textiles and clothing. The use of phase change materials in outdoor clothing	
UNIT IV	5
Wear Care – Usability of intelligent materials in work - Intelligent textiles for medical and monitoring applications	
UNIT V	5
Textiles for wearable health assistants - Intelligent textiles for children - Applications for woven electrical fabrics.	

References:

1. H Mattila, *Intelligent textiles and clothing*, Woodhead Publishing
2. A R Horrocks and S C Anand, *Handbook of technical textile*, Woodhead Publishing.

DMA408– WORK STUDY IN APPAREL INDUSTRY

Objective : *To impart knowledge on work study methods in apparel production.*

UNIT I	9
Productivity in apparel industry: units of productivity-Total time to do a job- Factors affecting productivity- work content and total time-Reducing work content due to the product and process method - reducing ineffective time due to worker and supervision .	
UNIT II	9
Work study: Definition, work-study and productivity - Basic procedure of work-study- Work study and the worker, supervisor and the management- working condition and the working environment.	
UNIT III	9
Method study: definition and objects of method study- Basic procedure, selection of work, Recording, examining, development of method- Apparel Factory lay out and movement of workers and material-String diagram- Man type flow process chart- multiple activity chart- travel chart.- Principle of motion economy- classification to movements- Two-handed process chart- micro motion study- SIMO chart- Define, installs and maintain improved method.	
UNIT IV	9
Work measurement: Definition, purpose, procedure and uses- Techniques of work measurement- Work sampling: need and use time study- definition- basic time study equipment- Time study forms- Selecting the job, steps in making a time study- Breaking the job into elements- Sample size, timing card element-stop watch procedure- Time Study rating- calculation of standard time- setting time standards for work with Apparel production machineries.	
UNIT V	9
Application of work study techniques in cutting, stitching and packing in garment industry- Comparative study of different manufacturing systems used in the garment production – group system, batch system- industrial system.-Productivity calculation in Stitching activity.	

References :

1. Johnson Maurice *Introduction of Work Study*, International labour Organization, Geneva, 1995.
2. Jacco Solinger *Apparel Manufacturing Hand Book*, Reinhold Co, 1998.
3. Juan Crlo Hiba *Improving working conditions and productivity in the garment industry* International labour Organization, Geneva, 1998.
4. Kantilal Ila, *Apparel Industry In India*, Prentice Hall, 1990.

DMA508 MATERIALS MANAGEMENT IN APPAREL

Objective: *The key objective of this course is to acquaint the students with decision making for effective and efficient purchase, storage and flow of materials in manufacturing and service organizations; Cost reduction techniques in prepurchase, purchase and post purchase systems; Modern material planning and delivery systems like MRP and JIT and Material handling and Logistics systems with focus on Textile and Apparel Industry.*

UNIT I	9
Role of Purchasing and Materials management –Objectives , Organization and Interrelationships , Determination and Description of Material Quality, Material Planning in Push and Pull Systems ,MRP and JIT .	
UNIT II	9
Determination and Description of Material Quality-Receiving and Incoming Quality Inspection, Acceptance Sampling Plans, Vendor process capability; Cost reduction Techniques-Standardization, Simplification and Variety Reduction; Value Analysis and Engineering	
UNIT III	9
Make or Buy Decision, Purchasing Research , Sources of Supply, Price Determination and Negotiation, Vendor Rating, Selection and Development, Legal aspects of Purchasing ;Public purchasing and Tendering ; International Purchasing- Procedures and Documentation; Purchasing of Capital equipment- Appraisal Methods, Evaluating Supplier’s Efficiency.	
UNIT IV	9
Stores Layout, Classification and Codification; Material Logistics- Warehousing Management, Material Handling : Cases from Textile and Apparel Industry	
UNIT V	9
Traffic and Transportation, Disposal of Scrap, Surplus and Obsolete materials; Inventory control of spare parts, Materials Information System.	

References:

1. Ansari .A. and Modarress.B.*JIT Purchasing*, Freepress,.
 2. Baily P. etc. *Purchasing Principles and Management*, Pitman
 3. Burt, David.N. *Proactive Procurement*. Engelwood Cliffs, New Jersey, PHI.
 4. Dobler,D.W. etc.*Purchasing and Materials Management*, New York,mcgrawhill.
 5. Farrington .Band Waters, Derek.W.*Managing Purchasing*, London, Chapman and Hall
 6. Dutta, A.K. *Integrated Materils Management*, New Delhi,PHI.
- Gopalakrishnan .P. and Sundershan.M. *Handbook of Materials Management* , New Delhi,PHI.